

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/000004

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D333/38 C07D417/10 C07D307/68 C07D409/10 A61K31/381
A61P25/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, BEILSTEIN Data, WPI Data, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 273 602 A (ELI LILLY AND COMPANY) 6 July 1988 (1988-07-06) examples 5,11	1-3,16, 26,28, 40,41
X	REUX, D. ET AL: "Cyclization of 3-(alkylthio)-1,1,3-tricyano-1-propenes to thiophenes" SULFUR LETTERS, 13(5), 197-202 CODEN: SULED2; ISSN: 0278-6117, 1991, XP009048207 page 199; compound 3F	1,3
X	AUGUSTIN, M. ET AL: "Thiophenes through S-alkylation" TETRAHEDRON, 32(24), 3055-61 CODEN: TETRAB; ISSN: 0040-4020, 1976, XP002330193 page 3056 - page 3057; compounds 4B,4E,4I,4M -/--	1,3,26, 28

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

2 June 2005

Date of mailing of the international search report

13/06/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 976 744 A (ELI LILLY AND COMPANY) 2 February 2000 (2000-02-02) claim 1 -----	1-41

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/000004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0273602	A	06-07-1988	EP 0273602 A1	06-07-1988
			JP 63159380 A	02-07-1988
			PH 24630 A	17-08-1990
EP 0976744	A	02-02-2000	AU 5134499 A	21-02-2000
			CA 2338916 A1	10-02-2000
			EP 0976744 A1	02-02-2000
			JP 2002521442 T	16-07-2002
			WO 0006156 A1	10-02-2000
			US 2004097499 A1	20-05-2004
			US 6617351 B1	09-09-2003